

City of San Diego Planning & Development Review **Building Development Review** 1222 First Avenue • MS-401 San Diego, CA 92101 (619) 446-5400

Building Newsletter 18-1

Soil Classification and Allowable Bearing Value

Interpretations of State and Local Building Codes 1998 California Building Code: Chapter 18 Revision Date: July 1999

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I. Natural Ground

Plans for all buildings and structures supported on natural ground require a preliminary soil report unless the foundations have been designed in accordance with Table No. 18-I-A of the Building Code.

When the foundation design is based on Table No. 18-I-A, the foundation plan must indicate the allowable soil bearing value and soil classification and must be signed by a civil engineer or architect licensed by the State of California. One- and two-story buildings of Type V construction designed for an allowable soil bearing value not to exceed 1,000 pounds per square foot (psf) are exempt from this requirement. When the allowable foundation pressure exceeds the values of Table No. 18-I-A, a preliminary soil report must be submitted with the plans. The preliminary soil report shall be prepared per the City of San Diego's *Technical Guidelines for Geotechnical Reports* manual.

II. Compacted Fill

Plans for all buildings and structures supported on fill require a preliminary soil report and a report of satisfactory placement of fill prepared by a licensed civil engineer. NOTE: Placement of fill greater than five feet in depth or in excess of 200 cubic yards requires a grading permit.

- A. When the compaction report indicates that the fill has been compacted to less than 90 percent relative compaction (defined as 90 percent of the maximum dry density determined in accordance with ASTM Test No. D-1557-78), an allowable soil bearing value per Table 18-I-A may not be assigned, but must be recommended by the soil engineer.
- B. When the compaction report indicates that the soil has been compacted to at least 90 percent relative compaction, but does not specify an allowable soil bearing value, the maximum bearing value that may be assumed for design is 1,000 psf.

III. Expansive Soil

A prelimanary soil report prepared by a civil engineer licenced in the State of California is required whenever expansive soil is present.

See Building Newsletter 18-2 for a detailed discussion of policies related to expansive soil.